KLICKITAT COUNTY SECTION

Goldendale White Salmon Bingen

Klickitat County, Washington

L N O O O **CKITAT**

PROFILE

GEOGRAPHY

Klickitat County is situated on the Columbia River, in south central Washington. The county lies on the western end of the south flank of the Horse Heaven Hills and the southeast flank of Mount Adams. On the north, the county borders the Simcoe Hills and contains part of the Yakima Indian Reservation. Rainfall ranges from 45 inches in the west to 10 inches in the east end of the county. Major streams include the Columbia River, White Salmon, Klickitat, Little Klickitat Rivers, the Swale and Rock Creeks.

The county is 84 miles long and varies between 13 and 29 miles wide. The 1994 Population was 17,700. The largest town is Goldendale, the county seat, with a population of 3,425, followed by White Salmon, with 1,915, and Bingen, with 660 people. A majority of the population is located in and near Goldendale, in the center part of the county, and Bingen/White Salmon, at the southwest corner of the county.

Klickitat County varies in both topography and climate from its eastern to western border. The general topography is one of mountains, plateaus, and narrow valley lowlands. There are three physical units developed for agriculture: the Horse Heaven Hills Plateau, the bars and benchlands of the Columbia River Gorge. The gorge of the Columbia, eroded through the Cascade Mountain Range, is the dominant and most scenic feature of the area. Elevations in Klickitat County vary from the average flood level of the Columbia River at White Salmon, of 50 feet above sea level, to mountain peaks, reaching 5,800 in the Simcoe Mountain Ridge. Most of the farm land is on elevated plateaus about 1,000 feet in elevation.

The Horse Heaven Hills plateau makes up the eastern third of the county. The area is a gently rolling plain that slopes to the Columbia River, being a tableland of basalt covered with a mantle of rich volcanic and wind-deposited soil. Terrain is accessible and highly adaptable for mechanized wheat farming on an extensive scale. The plateau is cut by Alder Creek, Glade Creek, and Pine creek. Farm communities Alderdale, Bickleton, Moonax, and Roosevelt are located on the upland. The plateau has an elevation of 3,015 at Bickleton and 241 feet at Alderdale on the Columbia River.

Klickitat Valley lies in the central part of the county and consists of bottom lands and river benchlands. The main branch has sources in the Simcoe Mountains and Horse Heaven Hills. Lower valley lands are at elevations of 1,100 feet at Goldendale and 263 feet at Klickitat. Most of the accessible farm land of the valley surrounds Goldendale. The Klickitat River descends to the Columbia at Lyle, through gorges and a narrow valley. Volcanic basalt rock underlays Klickitat Valley, and precipitous rock outcroppings exposed by stream cutting and wind erosion are common.

White Salmon Valley is in western Klickitat County. It is a short north-south valley, which heads on Mount Adams and descends through basaltic plateaus to the Columbia River. The upper valley contains prairies and basaltic table lands suited for agriculture. High prairie areas of level and rolling topography surround Guler and Troutlake at an elevation of about 20,000 feet. Some small river bottom areas of about 500 to 700 feet are found near White Salmon.

The Columbia River Gorge in Klickitat County is called the "North Bank." Most of it is precipitous, basalt cliffs and slopes, rising from a shoreline elevation of 50 feet to the 2,000 foot level. There are numerous small river bar flood plains and benchlands, which were flooded periodically in past years as the Columbia River rose and fell as much as 30 feet with the seasons. There are some benchlands at Dallesport, Bingen, Lyle, and White Salmon developed for tree fruit, berry, and vegetable farming. Construction of hydroelectric and navigation improvement dams, Bonneville, The Dalles, and John Day, have equalized the river level and also flooded some of the lower bars permanently.

Klickitat County land is broadly divided into seven general classes. Only about 30 percent of the county area is classified as good to fair land, suitable for crops and cultivated pastures. About 60 percent is too rough, too high, or too dry and is useful only for forest growth or grazing. About ten percent is too rocky or too dry even for agricultural or forestry use.

CLIMATE

The climate in Klickitat County reflects the effect of Pacific Ocean pressure systems and temperature changes associated with the changing seasons. During winter months, a prevailing low pressure system off the coast of the Pacific Northwest brings cold and wet weather to the area. During the summer months, however, the low pressure system is deflected to a northern position (Gulf of Alaska) and replaced by a high pressure system. This change is accompanied by hot and dry summer weather that is typical for the county.

Temperatures in Klickitat County are greatly affected by changes in elevation. In the winter, the average temperature is 37 degrees F at Dallesport; 30 degrees F at Satus Pass; 32 degrees F at Trout Lake; and 31 degrees F at Bickleton. The average daily minimum temperature for the county is 24 degrees F. The lowest temperature occurred at Trout Lake on January 26, 1957, and is -24 degrees F. Chinook winds occasionally bring a rapid rise in the winter temperature.

In summer the average temperature is 71 degrees F at Dallesport, 61 degrees F at Satus Pass, 63 degrees F at Trout Lake, and 64 degrees F at Bickleton. The average daily maximum temperature for the county is about 80 degrees F. The highest recorded temperature, which occurred at Dallesport on August 17, 1977, is 110 degrees F.

Klickitat County is located within a rain shadow created by the Cascade Mountains. Precipitation is greatest in the western part of the county and at higher elevations, reaching approximately 55 inches near Trout Lake. Precipitation decreases to the south and east until it is less than 6 inches at the Benton County line. Comparison of yearly precipitation data for five selected stations illustrates the decrease in precipitation occurring from west to east and areas of higher elevation to areas

of lower elevation within Klickitat County: Trout Lake 45 inches, Satus Pass 23 inches, Goldendale 17 inches, Dallesport 13 inches, Bickleton 14 inches. Most of the years precipitation is in the form of snow and rain, which occurs during the months of November-February. Summers are hot and dry, with July and August having little or no rainfall.

The average seasonal snowfall varies with elevation, but is usually light and seldom accumulates more than 10 inches. The greatest snow depth at any one time during the period of record was 86 inches. In unusually severe winters, snow is on the ground most of the time from late December until early February; but, in normal years, snow stays on the ground for not longer than two to four weeks at a time. The heaviest one day rainfall during the period of record was 4.35 inches at Trout Lake on January 15, 1974. Thunder storms occur on about seven days each year, and most occur in summer.

The average relative humidity in mid-afternoon is about 40 percent. Humidity is higher at night, and the average at dawn is about 75 percent. The percentage of possible sunshine is 80 in summer and 20 in winter. The prevailing winds are from the west and northwest, but the strongest are from the southwest. The average velocity ranges from eight to 10 miles per hour in spring.

ECONOMIC TRENDS

Klickitat County has traditionally relied on agricultural crops, along with lumber and wood products, as the main economic drivers. Although the methods for harvesting crops and trees have changed drastically, and the types of agricultural products have changed, Klickitat County continues to rely on these sectors for a bulk of its employment. The county's economy has continually experienced the cyclical downturns associated with these activities. In order to balance out the economy and increase economic diversity, the Klickitat Economic Development Organization and the Port of Klickitat have been spearheading economic development activities to promote various manufacturing operations. Given the steady decline in the timber industry, future employment will rely on tourism and recreational opportunities as well as manufacturing. One addition to the county's economy is the development of a landfill site near Roosevelt, which accepts waste from other communities on the west side of the cascades. The powerhouses located along the Columbia River have provided relatively cheap power for operation of an aluminum smelter in the county, which has also experienced cyclical downturns.

The types of agricultural production in the county include harvesting of wheat, orchard crops, and some row crops. With drought conditions in other parts of the country, farmers have done fairly well in recent years. In addition to croplands, there are a number of cattle and dairy operations in the county.

The Columbia River Gorge, being noted for its strong winds, has become an international destination point for windsurfers. Some of the best locations are located along the Klickitat shoreline. The county may be able to capitalize off of this phenomenon. In addition to windsurfing, there are additional opportunities for economic growth in recreation and tourism.

Klickitat County will continue to rely on agricultural and timber products to support its economy, while the economic base diversifies to include more manufacturing and tourism activities. The

AMENITIES

Klickitat has a very diverse topography, ranging from the steep Cascade Mountains, river valleys and meadows, to the arid rolling hills on the east side and the Columbia River Gorge. All of these areas provide year round recreational opportunities. In addition to the natural setting, the rural characteristics of the county include small towns, with their own unique identity, and communities that provide various cultural opportunities. There are a number of community events reflecting the historical past of the area.

The county is home to the Maryhill museum that houses a number of permanent and temporary art exhibits from around the world. Additionally, there is the Goldendale Observatory for astronomists of all levels. There are four state parks in Klickitat County, including Horsethief Lake, Brooks Memorial, Maryhill, and Goldendale Observatory. Conboy Lake National Wildlife Refuge, located near Glenwood, provides habitat for a number of waterfowl, deer, elk, and other Fauna.

There are a number of recreational opportunities in the area for all seasons. The Columbia River Gorge, encompassing part of Klickitat County, provides some of the best windsurfing in the world. It has become a world-class location for windsurfing. The county has realized the economic benefits of recreation and tourism to the area. The rural atmosphere, with abundant recreational opportunities, makes Klickitat County a very livable place.